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ABSTRACT

The paper discusses the effects of a specific culture, in this case Chilean, on bilingual handicapped students' responses to test items. Even though the tests used were Spanish translations, Ss' responses were influenced by lifestyles, the educational system, and the physical resources available in the classroom setting. Evidence is cited to indicate that simple translations and adaptations of existing tests result in lower reliability, validity, means, and standard deviations. The author recommends supplementing formal tests with informal ones designed specifically for use in the home country and based on material geared to specific cultural needs. (CL)

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CULTURAL CONSIDERATIONS IN THE ASSESSMENT OF BILINGUAL HANDICAPPED CHILDREN

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In recent years the question of whether to administer psycho-educational assessments in the dominant languages of bilingual children has increased in complexity due to the number of test adaptations which are necessary in order to meet the needs of those whose cultural and linguistic backgrounds differ from that of the group on which original test norms are based. A number of court actions (Diana v. State Board of Education, 1970; United States v. Texas, 1971; Aspira of New York Inc. v. New York Board of Education, 1972; Guadalupe Organization Inc. v. Tempe Elementary School District, 1972) resulted in provisions for testing in both the child's first and second languages, but little regard has been given to the cultural background in the interpretation of test data used as a basis for identifying specific strengths and weaknesses.

While numerous studies have focused on finding ways of adapting tests to the linguistic needs of bilingual children of Hispanic background, only a few studies have concentrated on the examination of problems encountered in adapting tests to cultural factors as well.

Hymes (1970) contended that it is wrong to equate a people's cultural identity with linguistic identity and that singling out language as the central embodiment of a people's psychological character negates the specific qualities of the culture which distinguish that

people from others. Accordingly, particular differences in linguistic habits go together with specific differences in thought and behavior, thus making it impossible to separate language from culture. Language, Hymes states, adapts to cultural needs.

Hymes observed that some languages lack literal equivalents of words in other languages due to different connotations and interpretations that are culturally specific. Likewise, a lack of similar experiences between languages often results in an absence of words that describe experiences familiar to the other culture.

Some languages make no distinction between terms. Only through the context of the situation are ideas conveyed. On the other hand, some languages use highly descriptive words which result in a richer language when describing emotions or certain aspects of the environment.

In brief, Hymes concluded that when adaptations from one language to another are desired, it is necessary to go beyond the linguistic component and analyze the essence behind the use of the words and expressions.

Bhushan (1974) similarly emphasized that good tests cannot be constructed simply by translation. In adapting the Otis Quick-Scoring Mental Ability Tests for the French culture, Bhushan found that certain terms in one language did not always carry the same meaning in the second language. Questions, Bhushan found, were also frequently invalid due to differences in political and cultural structures, different interpretations of translated words, and the phrasing of questions in a manner that was uncommon to the other culture.

Several investigations (Roca, 1955; Brier, 1973; Ramimez, 1972;

Zirkel, 1972; Garcia, 1973; Perez, 1980) substantiated the reports of Hymes and Bhushan that mere translation of English-language tests into Spanish is an inappropriate means of measuring Spanish-speaking children's abilities. Translated tests need to reflect both linguistic and cultural values found among the Hispanic populations on which the tests are used.

The purpose of this paper is to demonstrate how aspects of a specific Hispanic culture, in this case Chilean, influenced subjects' responses on a variety of test items even though the tests used were translations from English to Spanish.

Method

Data was compiled by the author while working as a Peace Corps volunteer and Educational Psychologist for the Chilean Ministry of Education, Division of Teacher Training, Experimentation, and Educational Research from September, 1977 through August, 1979.

Subjects were elementary school-aged children attending regular and special education schools in the cities of La Serena, Ovalle, and Coquimbo, all located in the IV Region of Chile.

Subjects' responses were analyzed for cultural specificity using the following instruments:

- Spanish translation of the Wechsler Intelligence Scale for Children
- Spanish adaptation of the Peabody Picture Vocabulary Test
- Spanish translation of the Token Test
- Auditory Sequential Memory subtest of the Illinois Test of Psycholinguistic Abilities
- Bender Gestalt Test
- Frostig Developmental Test of Visual Motor Perception

Results

Influence of Culture on Subjects' Responses

In spite of using the Spanish translations of tests, aspects of the Chilean culture were clearly revealed through subjects' responses to a number of items. When asked, "How many things make a dozen?" on the Wechsler Information subtest, Chilean subjects frequently registered a lack of understanding because most products sold by the dozen in the United States, e.g. eggs and pastries, are purchased either singly or by the kilo in Chile. Similarly the question "What are the four seasons of the year?" was met with uncertainty because the IV Region of Chile does not experience four clearly defined seasons. The significance of the abbreviation "FF.CC." though specifically geared to the Chilean culture since it stands for the national network of railroads was consistently missed by subjects in the IV Region where trains are virtually unknown.

On the Comprehension subtest the question was asked, "Why is it better to build a house of brick rather than wood?" For the subjects in this study, this was a difficult question to answer because wood was not often used in the building of houses in the IV Region. Instead, most of the homes were made of adobe. Consequently, many children knew of no other buildings except the brick-like structures and could not make the comparison. The Comprehension question pertaining to why cotton is used in making cloth was also inappropriate for many Chilean subjects because they were more familiar with wool. Finally, the questions pertaining to the election of governmental officials was met with a total lack of comprehension on the part of younger children who were familiar only with the militarily-controlled government that has been in power since 1973.

In the Similarities subtest, the question was asked, "You walk with your feet and throw with your...?" Since the dominant sport in Chile is soccer, many subjects completed this sentence with "feet," explaining that "feet" was the only logical answer since the ball cannot be touched or thrown, with the hands, without a foul being called.

Cultural factors were also revealed through picture substitutions in adapting the Peabody Picture Vocabulary Test to the IV Region. In frame 34, for example, "skiing" (picture 4) was replaced by "cortar" (picture 3) since skiing is unknown in the IV Region. "Pledging" (picture 3) in frame 47 was replaced by "saludo" (picture 4) since Chileans do not show their allegiance to their country by pledging allegiance to the flag. They sing the national anthem instead. Because pumpkins and haystacks were unknown in the northern part of Chile, picture two in frame 74 did not hold much significance for the subjects as representations of autumn. Another problem with autumn being used as a season is that there is no color change or foliage loss that clearly defines it in the IV Region. Thus, the item was changed to "espacio" and picture one. Similarly, "cornucopia" (picture 3) in frame 102 was changed to "jeroglifico" (picture 2).

The impact of the educational system on subjects' responses was also evidenced by their performances in various areas. Observations in a typical classroom revealed an instructional methodology that was very traditional with emphasis being on teacher lectures. Another frequent practice was that of having the children copy material to be learned from the blackboard into notebooks. The effect of these practices was seen when the subjects were administered tests of auditory sequential memory, as in the Illinois Test of Psycholinguistic Abilities or the Digit Span

subtest of the Wechsler. The subjects consistently performed poorly. It is the opinion of this author that the poor performance in auditory memory was a direct result of a lack of training in the classroom to develop this skill. This contention is supported in a 1980 study by Perez which examined the performance of bilingual children on the Spanish version of the ITPA. Perez found that bilingual children scored significantly higher on tests in the visual-motor channel than on tests in the auditory-vocal channel. He concluded that bilingual children were penalized on auditory-vocal tests regardless of the language in which the test was administered. The contention of the present author is that the children, 80% of whom were raised by parents born in Spanish-speaking countries, may have scored lower because those skills measured may not have been stressed within their cultures.

The physical resources available in the Chilean educational system were also influential cultural factors. Observations indicated that subjects who had previously received low scores when administered the Bender Gestalt and the Frostig had used the dull knife-sharpened pencils generally used by Chilean students because of the lack of pencil sharpeners. Their scores improved significantly when they were provided with pencils sharpened to a fine point.

Influence of Culture on Test Scores

The effect of test adaptations on the scores of Hispanic students has been examined by a number of investigators. Roca (1955) noted that the average Puerto Rican child scored 12 IQ points less than the average American child on the Spanish version of the Wechsler. On the Spanish version of the Stanford-Binet Puerto Rican subjects' mean scores were 95.65.

When norms were established for Puerto Rican children between six and ten years of age, the results showed that they too scored lower than American children. In all cases the lower scores were explained in terms of cultural differences.

Other evidence substantiates the belief that simple translations and adaptations of existing tests result in new tests of lower reliability, validity, means, and standard deviations. Simon and Joiner (1976) examined the issue of whether a Mexican version of the Peabody could be improved by directly translating both Forms A and B of the American test and using a set of decision procedures to select the better item from each pair. Results showed that the reliability of the simple translation suffered, but could be improved by using simple item selection rules and reordering.

Valdivia and Moncada (1979) compared Chilean norms of the translated Token Test with the original standardization. A random sampling of 288 children age 6 through 12 years was chosen from three schools in La Serena considered to be representative of high, medium, and low socioeconomic levels. The results clearly indicated that, in spite of the Spanish translation, a discrepancy existed between the Chilean and the English norms. Specifically, the performance of all three Chilean groups between the ages of 6 and $8\frac{1}{2}$ years fell below those of both the high and low English socioeconomic groups. Between the ages of $8\frac{1}{2}$ and $10\frac{1}{2}$ years, the middle and high Chilean groups surpassed the performance of the low English group, but still fell below the higher English socioeconomic level. Beyond age $10\frac{1}{2}$, all three Chilean levels once again fell below both levels in the English sample. As in the Roca study (1955), Valdivia and Moncada explained the lower scores in terms of cultural differences.

Discussion

The observations reported in this paper support earlier investigations that mere language translations of tests are not the answer to adequately assessing the learning strengths and weaknesses of children from different cultural backgrounds. Not only did characteristics unique to the Chilean culture surface on tests, but in the case of the Token Test, normative data was also different. Mean scores were below those of the original standardization sample.

Although there is a lack of statistical evidence in this study to support those assumptions made regarding the impact of using tests that have not been controlled for cultural factors, the information presented nevertheless poses a number of issues worthy of further investigation.

First, since Chilean subjects could not respond to items that were influenced by the American culture, the question arises as to the degree of influence that is exerted on a bilingual child by the native culture even after exposure to the American culture. Are professionals measuring the bilingual child's academic strengths and weaknesses or his ability to assimilate Americanisms into his lifestyle?

Second, Clark (1965) maintained that the test adaptation process could be facilitated if the languages were similar. Thus, if using a language common to a number of cultures, i.e. Spanish, to satisfy the linguistic components of test adaptation, what general types of questions could cross-cultural studies reveal that could be considered culturally unbiased but which still could measure the child's ability to use language skills. On a smaller scale, what general types of questions could be used to take into account cultural differences within a country where

extremes in distances, climates, people, or resources all make for a diversified society.

Third, when changes are made in item ordering and content to adapt a test to specific cultural needs, how much concern should be given to ensure that the levels of item difficulty and item validity are still maintained? Unless measures are taken to statistically correct the normative data, adapted tests should not be used without caution because of inaccurate conclusions which may be drawn regarding the child's overall ability levels. This point is particularly important for children who have been identified as handicapped in their own countries (with test norms geared to another country) and who request special education services through American programs. Unless it is certain that the instruments, norms, and procedures used in the initial assessment were appropriate for that child, reevaluation should be considered.

Directions for the Future

As noted, if used in isolation, formal tests translated for other languages and cultures may result in misleading information if used indiscriminately with some groups of bilingual children. However, the task of providing these children with appropriate multi-factored evaluations may be facilitated by supplementing formal tests (even if they lack appropriate norms) with informal tests designed expressly for use in the home country and based on material geared to specific cultural needs. What is of primary importance in assessing bilingual children is to get a clear and comprehensive picture of their learning styles and overall abilities in the dominant language and culture before comparing them to

the demands of the American educational system. Only through knowledge of the bilingual child's relative strengths and weaknesses can there be appropriate planning of his educational goals.

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